NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE STANDARD

WETLAND WILDLIFE HABITAT MANAGEMENT

(acre)
CODE 644

DEFINITION

Retaining, developing, or managing habitat for wetland wildlife.

PURPOSE

To maintain, develop, or improve habitat for waterfowl or other wetland associated flora and fauna.

CONDITIONS WHERE PRACTICE APPLIES

On or adjacent to wetlands, rivers, lakes and other water bodies where wetland associated wildlife habitat can be managed. This practice applies to natural wetlands and water bodies as well as wetlands that may have been previously restored (657), enhanced (659), created (658)

CRITERIA

General Criteria Applicable to All the Purposes Stated Above

The identification of the required management actions to achieve the planned purpose, will be based on Hawaii Biology Technical Notes No. 4, 5, and 6 or other suitable wildlife habitat evaluation procedures. The evaluation procedure will be used to determine a wetland habitat suitability for either individual fields, habitat areas, type or natural community as well as to provide an overall evaluation for the entire property or operating unit.

The following habitat elements will be considered when assessing wetland wildlife habitat. Not all may apply to every habitat type.

- Island Occurrence (where found)
- Elevation Range (where found)
- Food (type)
- Nesting Cover (types of plants, trees, forest, etc.)
- Nesting Habits
- Escape Cover (types of plants, trees, forest, etc.)
- Threats (disease, habitat loss, other animal species, etc.)

If the habitat evaluation demonstrates existing wetland habitat for target species, the habitat will be preserved, maintained, or improved in its present state of toward optimum conditions.

If the habitat evaluation demonstrates potential wetland habitat for target species, the habitat will be improved and maintained to meet minimum acceptable or above conditions.

The habitat evaluation will identify which elements may be weak or missing. For the desired species, the types, amount, and distribution of habitat elements and the required management actions to achieve the planned purpose will be identified.

Acceptable management actions include: manage vegetation; manage water levels; manage plant pests; manage animal pests; graze to control vegetation; and fallow cropped wetland.

The use of plant materials will be

appropriate to wetland wildlife habitat of concern. Native plants will be used wherever possible.

The land owner or operator will obtain all necessary local, state and federal permits that apply.

CONSIDERATIONS

Consider effects of movement of dissolved substances on groundwater and on downstream surface waters.

Consider effects of hazardous materials expected or known to occur on the site on wildlife or human use related to wildlife.

Consider effects of management actions on compliance with state and federal hunting regulation (e.g., baiting).

Consider effects of management on non-target fish and wildlife species and Threatened and Endangered Species.

Consider effects of livestock grazing on runoff, infiltration, and wetland vegetation.

Consider using artificial nesting structures that are designed for the region.

Consider locating the management practice adjacent to existing wetlands and other water bodies.

Consider the impact of elevated wildlife uses on adjacent lands (e.g., crop depredation).

Consider effect of volumes and rates of runoff, infiltration, evaporation, and transpiration on the water budget.

Consider effects on downstream flows or aquifers that would affect other water uses or users.

Consider adjacent wetlands or water bodies that contribute to wetland system complexity and diversity, decrease habitat fragmentation, and maximize use of the site by wetland-associated wildlife.

Consider effects on movement of sediment and soluble and sediment-attached substances carried by runoff and/or wind.

PRACTICE EFFECTS

Soil

Improved management of wetland species will reduce runoff and erosion particularly when project includes management of alien animal species. Initial soil disturbance activities and removal of vegetative cover will leave the land susceptible to erosion until revegetation occurs. Use of heavy equipment when soils are saturated may compact soil and hinder establishment of trees.

Water

Improved management of species will enhance water quality of nearby water bodies. Any ground disturbance for planting or removal of invasive plants may temporarily cause water quality problems, but will benefit water quantity and quality in the long run.

Air

Initially, there may be a slight reduction in air quality from site disturbance activities. Smoke, when burning prescribed, or airborne sediment may reduce visibility and create a safety hazard. If pesticides are used for vegetation removal, there may also be an increase in chemical drift from pesticide applications, depending upon the amount and kind used during site preparation. Exposed soil will be subject to wind erosion until desirable cover is established.

Plant

Establishment and growth of suitable woody vegetation will significantly improve with the removal of unwanted plants and debris that compete for space, sunlight, moisture

and/or nutrients. Short-term loss in productivity may occur if disturbance of soil has caused damage to existing desirable woody vegetation.

Animal

Improved management with elements that will provide food, shelter and cover to wetland wildlife will give animal resource concerns significant improvement.

For additional information on physical effects, refer to Section V of the Field Office Technical Guide.

PLANS AND SPECIFICATIONS

Site-specific specifications which document the requirements for installing, operating and maintaining the practice on a particular site to achieve its intended purpose(s) will be prepared in accordance with this standard and the practice specification.

The site-specific specifications shall be documented on the NRCS Hawaii Jobsheet for this practice and given to the client. Other documents such as worksheets, maps, drawings, and narrative statements in the conservation plan may be used to plan and design the practice and to prepare the site-specific specifications.

The planned purpose; target species; and the amount, kind, and location of the required management actions will be identified.

OPERATION AND MAINTENANCE

The purpose of operation and maintenance is to insure that the practice functions as intended over time.

The effectiveness of the planned management actions will be evaluated after sufficient time has past for establishment and to gather reliable data. The evaluation of effectiveness will be based on how well the treated habitat meets the management objectives for the target wildlife species. Periodic evaluations will be conducted throughout the planning period.

Changes to the management actions will be made as necessary per each evaluation.

All structural and vegetative measures installed via this practice, will be maintained and repaired as necessary to ensure that they function as intended.